

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace, without prejudice, all prior versions, and listings, of claims in the application.

**LISTING OF THE CLAIMS:**

1-4. (Canceled).

5. (Currently Amended) A sensor system comprising:

~~a first sensor for receiving power via a line, the first sensor including a transmitter module for transmitting, at a point in time of receiving a first power level, data via the line for a first time interval; and~~

~~a second sensor connected to the line in parallel to the first sensor, the second sensor transmitting data after the first time interval for a second time interval;~~

~~wherein each of the first and second sensors includes a timing sequence control system which is triggered by the point in time and controls a subsequent transmission of the first and second sensors~~

a first sensor powered by a line, the first sensor preprogrammed with a first time interval for transmitting data via the line;

a second sensor powered by the line in parallel with the first sensor, the second sensor preprogrammed with a second time interval for transmitting data via the line;

a first timing sequence control system included in the first sensor; and

a second timing sequence control system included in the second sensor;

wherein, at a point in time of receiving a first power level, the first timing sequence control system is triggered and, upon being triggered, controls the transmission of the first sensor so that the first sensor transmits data via the line for the first time interval, and

wherein, at a point in time of receiving the first power level, the second timing sequence control system is triggered and, upon being triggered, controls the transmission of the second sensor so that the second sensor transmits data via the line for the second time interval after the first time interval.

6. (Currently Amended) The sensor system according to claim 5, wherein the first and second sensors are always ~~powered at~~supplied at least a second power level, the second power level being lower than the first power level.

7. (Currently Amended) The sensor system according to claim 5, wherein the first and second sensors detect ~~at least~~ the first power level via a voltage change.
8. (Currently Amended) The sensor system according to claim 5, wherein the first and second sensors are connected to a control unit via the line, data transmission only being provided from the sensors to the control unit, and not from the control unit to the sensors.
9. (New) A method for sequential transmission of sensor data, comprising:  
    powering a first sensor by a line, the first sensor preprogrammed with a first time interval for transmitting data via the line; and  
    powering a second sensor by the line in parallel with the first sensor, the second sensor preprogrammed with a second time interval for transmitting data via the line;  
    wherein a first timing sequence control system is included within the first sensor and a second timing sequence control system is included within the second sensor;  
    wherein, at a point in time of receiving a first power level, the first timing sequence control system is triggered and, upon being triggered, controls the transmission of the first sensor so that the first sensor transmits data via the line for the first time interval, and  
    wherein, at a point in time of receiving the first power level, the second timing sequence control system is triggered and, upon being triggered, controls the transmission of the second sensor so that the second sensor transmits data via the line for the second time interval after the first time interval.
10. (New) The method according to claim 9, wherein the first and second sensors are always supplied at least a second power level, the second power level being lower than the first power level.
11. (New) The method according to claim 9, wherein the first and second sensors detect at least the first power level via a voltage change.
12. (New) The method according to claim 9, wherein the first and second sensors are connected to a control unit via the line, data transmission only being provided from the sensors to the control unit, and not from the control unit to the sensors.

13. (New) The method according to claim 9, wherein the first and second sensors are always supplied at least a second power level, the second power level being lower than the first power level, wherein the first and second sensors detect at least the first power level via a voltage change, and wherein the first and second sensors are connected to a control unit via the line, data transmission only being provided from the sensors to the control unit, and not from the control unit to the sensors.